Serial No. 09/201,530
Page 2 of 12

IN THE CLAIMS

Please replace the previous claims with the following claims:

1.   (currently amended) Apparatus for providing demand television comprising:

a broadcast encoder for receiving and encoding a real-time video frame sequence to form a broadcast bitstream; and

a storage encoder for receiving and encoding the real-time video frame sequence to form a plurality of storage bitstreams, wherein said storage encoder comprises:

a first encoder for producing a play bitstream that contains information that, when decoded, produces a forward play video frame sequence, said first encoder receiving and encoding the real-time video frame sequence contemporaneously with said broadcast encoder receiving and encoding said real-time video frame sequence;

a frame subsampler for receiving and subsampling the real-time video frame sequence contemporaneously with said broadcast encoder and first encoder receiving and encoding said real-time video frame sequence;

a buffer, for storing subsampled frames of the real-time video frame sequence;

a second encoder for producing, contemporaneously with said broadcast encoder receiving and encoding said real-time video frame sequence, both (i) a fast forward bitstream that contains information that, when decoded, produces a fast-forward video frame sequence[[;]], and a third encoder for producing (ii) a fast-reverse bitstream that contains information that, when decoded, produces a fast-reverse video frame sequence; and

a controller that selects subsampled frames from the buffer and couples selected frames to the second and third encoder[[s]] in such a manner that said producing of said fast forward bitstream and said fast reverse bitstream is multiplexed over time.

372308-1

2.   (Original) The apparatus of claim 1 wherein said broadcast encoder is a high
data rate encoder.

3-5.   (Canceled)

6.   (Previously presented) The apparatus of claim 1 wherein said first encoder is an
MPEG encoder that encodes N frames of the video sequence.

7.   (Original) The apparatus of claim 6 wherein said second and third encoders are
MPEG encoders that encodes N subsampled frames.

8.   (Previously presented) The apparatus of claim 1 wherein the controller
multiplexes selection of the frames from the buffer to apply a plurality of subsampled
frames to said second encoder to form said fast forward bitstream and then apply a
plurality of subsampled frames to said third encoder to form said fast reverse bitstream.

9.   (currently amended) A method for providing demand television comprising the
steps of:

encoding[[,]] in real-time, using a broadcast encoder, a broadcast video frame
sequence to form a broadcast bitstream, while contemporaneously encoding the
broadcast video frame sequence to form a plurality of storage bitstreams, wherein said
plurality of storage bitstreams are contemporaneously formed by the steps of:

encoding, using a first storage encoder, said frames to form a play
bitstream contemporaneously with said encoding, in real-time, said broadcast
video frame sequence to form said broadcast bitstream;

subsampling said broadcast video frames contemporaneously with
respect to said encoding said frames to form said broadcast bitstream and said
play bitstream;

buffering said subsampled frames; and

generating a fast forward bitstream and a fast reverse bitstream in a time
multiplexed manner, said generating comprising:

372308-1

recalling said buffered frames in a forward time sequence order;

encoding, using a second storage encoder, said recalled buffered frames to form a fast forward bitstream;

recalling said buffered frames in a reverse time sequence order; and

encoding, using said second storage encoder, said recalled buffered frames to form a fast reverse bitstream.

10.   (Original) The method of claim 9 wherein said broadcast bitstream is a high data rate bitstream.

11-12. (Canceled)

13.   (Previously presented) The method of claim 9 wherein said play bitstream when decoded forms a standard play frame sequence.

14.   (Previously presented) The method of claim 9 wherein said fast forward bitstream, when decoded, forms a fast forward frame sequence.

15.   (Previously presented) The method of claim 9 wherein said fast reverse bitstream, when decoded, forms a fast reverse frame sequence.

16.   (Previously presented) The method of claim 9 wherein said transmitting step further comprises the steps of:

recalling from said storage device a particular bitstream in response to a request for a particular bitstream type from a subscriber terminal;

addressing the requested bitstream to said requesting subscriber;

transmitting said requested bitstream to said subscriber equipment.

17.   Canceled.

372308-1

Serial No. 09/201,530
Page 5 of 12

18.   (Previously presented) The method of claim 9 wherein the method further comprises a step of switching from transmitting a fast forward bitstream to transmitting said broadcast bitstream upon reaching the indicator.

19-27. (Canceled).

28.   (Previously presented) The apparatus of claim 1, further comprising:
        a transmission system for transmitting the broadcast bitstream to subscriber equipment.

29.   (Previously presented) The apparatus of claim 28, further comprising:
        a storage device for storing the plurality of storage bitstreams, wherein the storage device stores the plurality of storage bitstreams contemporaneously to the transmission system transmitting the broadcast bitstream.

30.   (Previously presented) The apparatus of claim 28, wherein said fast forward bitstream contains an indicator that delimits an end of available data such that a transition from said fast forward bitstream to at least one of said broadcast bitstream and said play bitstream is appropriate.

31.   (Previously presented) The method of claim 9, further comprising:
        broadcasting the broadcast bitstream to subscriber equipment, while contemporaneously storing the plurality of storage bitstreams within a storage device.

32.   (Previously presented) The method of claim 9, wherein upon a subscriber selecting to view information previously broadcast by the broadcast bitstream, transmitting to the subscriber the storage bitstream.

33.   (Previously presented) The method of claim 9, wherein said fast forward bitstream contains an indicator that delimits the end of available data such that a

372308-1

Serial No. 09/201,530
Page 6 of 12

transition from said fast forward bitstream to at least one of said broadcast bitstream and said play bitstream is appropriate.

34.   (Previously presented) The method of claim 33, wherein said storage bitstream comprises at least a play bitstream and a fast forward bitstream, and upon said fast forward bitstream being exhausted of data, automatically switching from said storage bitstream to said broadcast bitstream.

35.   (new) The apparatus of claim 1, wherein the controller couples a plurality of video frames, which form a group of pictures (GOP), to the second encoder to form the fast forward bitstream, and then couples the same plurality of frames, having the frames organized in reverse order, to the second encoder to form the fast reverse bitstream.

36.   (new) The method of claim 9, comprising coupling a plurality of video frames, which form a group of pictures (GOP), to the second encoder to form the fast forward bitstream, and then coupling the same plurality of frames, having the frames organized in reverse order, to the second encoder to form the fast reverse bitstream.

372308-1